

Monthly Temperature Grids for Alaska, British Columbia, and Yukon – 1961-2009

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Contents: 588 esri grid files (.asc) with mean monthly temperature estimates covering Alaska, British Columbia, and Yukon.

Resolution: 2km x 2 km grid cells.

Units: hundredths of degrees Celsius

Projection information: Albers Equal Area Conic

NAD_1983_Albers

Projection: Albers

False_Easting: 0.000000

False_Northing: 0.000000

Central_Meridian: -154.000000

Standard_Parallel_1: 55.000000

Standard_Parallel_2: 65.000000

Latitude_Of_Origin: 50.000000

Linear Unit: Meter

GCS_North_American_1983

Datum: D_North_American_1983

Grid Extent:

ncols 2656

nrows 1351

xllcorner -2305066.118143

yllcorner 54595.150471

cellsize 2000.000000

NODATA_value -9999

Grid Processing Explanation:

Grids were created by resampling PRISM monthly temperature norms between 1971-2000 (for Alaska) and 1961-1990 (for British Columbia and Yukon) from a resolution of 771 m to a resolution of 2 km. The resampled climatic norm grids were then merged for each calendar month. Absolute anomalies, or the difference between measured monthly precipitation and the PRISM monthly norm at that location, were calculated for each month between 1/1961 and 12/2009 at Alaskan and Canadian weather station locations. Anomalies were interpolated over the entire grid extent using a splines with tension approach (tension = 0.8). Gridded monthly anomalies were then added to the PRISM norm to create a grid of mean monthly temperature in the region for all months between 1/1961 and 12/2009.

A database of 650 weather stations was used to generate monthly anomalies between 1/1961 and 12/2009. On average, 225 of these stations reported data per month within this period. Each station used has at least 36 months of (not necessarily consecutive) data between 1961 and 2009.

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